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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,065	11/19/2003	Vikram Rai	4-2	7231

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EXAMINER	
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ART UNIT	**PAPER NUMBER**
2617	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/717,065	RAI ET AL.	
	Examiner	Art Unit	
	Un Cho	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 August 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-11 and 13-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-11 and 13-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1, 5, 8 and 14 are objected to because of the following informalities:

Claims 1, 5, 8 and 14 recites "(Currently Amended), it should recite --(Previously Presented)-- instead.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 2, 5, 6, 8 – 10, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Sindhushayana et al. (US 2006/0114910 A1).

Regarding claim 1, Lee discloses providing at least one permanent virtual pipe on the high-speed forward channel for transmission of the data bursts (providing a supplemental channel (SCH) for high-speed transmission of data; Lee: Page 3, Paragraph 0048, lines 1 – 9); scheduling transmission of burst segments of the data bursts on the at least one permanent virtual pipe in a round-robin manner among different data bursts (scheduling transmission of burst segments of the data bursts on the SCH channel for a plurality of users); and transmitting the burst segments on the at least one virtual pipe in

accordance with the scheduling (transmitting according to the scheduling; Lee: Page 3, Paragraph 0048, line 14 through Page 4, Paragraph 0051, line 5).

However, Lee as applied above does not specifically disclose comprising a plurality of different width virtual pipes on the high-speed forward channel for transmission of the data bursts, at least one of the plurality of different width permanent virtual pipes being wider than another of the virtual pipes and at least one burst segment of each data burst being scheduled for transmission on the widest virtual pipe. In an analogous art, Sindhushayana remedies the deficiencies of Lee by disclosing a High Data Rate system (HDR) having varying slot sizes and at least one of the slot sizes being wider than others (Sindhushayana: Page 3, Paragraph 0035, line 1 through Paragraph 0036, line 16), thus smaller the slot size higher the throughput and bigger the slot size lower the throughput, as shown in Table 1, moreover, the rate control algorithm is implemented by the remote station in order to determine which base station in the active set can provide the best throughput and to determine the maximum forward link data rate at which the remote station can receive packets with sufficient reliability so that the system can perform the initial data transmission at a high data rate and ramped down as needed (Sindhushayana: Page 4, Paragraph 0042, line 1 through Paragraph 0045, line 13 and Page 5, Paragraph 0051, lines 1 – 5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Sindhushayana to the system of Lee in order to provide an efficient high data

rate system that can control the data throughput of a wireless communication system based on the report from the remote station along with the use of a scheduler unit which can be configured to schedule a multi-slot packet transmission to a remote station in accordance with a scheduling algorithm to enhance system throughput.

Regarding claim 2, Lee as applied above discloses providing at least one permanent virtual pipe comprises provisioning predetermined channel resources to the at least one virtual pipe (Lee: Page 4, Paragraph 0052, lines 13 – 24).

Regarding claim 5, Lee as applied above does not specifically discloses scheduling transmission of the burst segments of a data burst amongst the different width virtual pipes in a round robin manner. In an analogous art, Sindhushayana remedies the deficiencies of Lee by disclosing that a scheduling unit in the base station monitors the remote stations that are operating within its range and determines which remote station will be the next data packet recipient (Sindhushayana: Page 4, Paragraph 0045, lines 1 – 13). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Sindhushayana to the system of Lee in order to provide an efficient high data rate system that can control the data throughput of a wireless communication system based on the report from the remote station along with the use of a scheduler unit which can be configured to schedule a multi-slot packet transmission to a remote station in accordance with a scheduling algorithm to enhance system throughput.

Regarding claim 6, Lee as applied above discloses wherein the base station operates in accordance with CDMA2000 standards (Lee: Page 3, Paragraph 0037, lines 1 – 3).

However, Lee as applied above does not specifically disclose that the virtual pipes are provided at widths chosen from among: 19.2kbps, 38.4kbps, 76.8kbps and 153.6kbps. In an analogous art, Sindhushayana remedies the deficiencies of Lee by disclosing that the size of slots are related to data rates such as 38.4kbps, 76.8kbps and 153.6kbps. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Sindhushayana to the system of Lee in order to provide an efficient high data rate system that can control the data throughput of a wireless communication system based on the report from the remote station along with the use of a scheduler unit which can be configured to schedule a multi-slot packet transmission to a remote station in accordance with a scheduling algorithm to enhance system throughput.

Regarding claim 8, the claim is interpreted and rejected for the same reason as set forth in claim 1.

Regarding claim 9, Lee as applied above does not specifically disclose a burst segment control means associated with the at least one permanent virtual pipe for storing when each burst segment is scheduled for transmission, the transmitting means transmitting a burst segment in response to a signal from said burst segment control means to transmit the burst when it is scheduled. In

an analogous art, Sindhushayana remedies the deficiencies of Lee by disclosing a scheduling unit storing parameters to be used when transmitting multi-packets (Sindhushayana: Page 5, Paragraph 0047, lines 1 – 14). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of Sindhushayana to the system of Lee in order to provide an efficient high data rate system that can control the data throughput of a wireless communication system based on the report from the remote station along with the use of a scheduler unit which can be configured to schedule a multi-slot packet transmission to a remote station in accordance with a scheduling algorithm to enhance system throughput.

Regarding claim 10, the claim is interpreted and rejected for the same reason as set forth in claim 2.

Regarding claim 13, the claim is interpreted and rejected for the same reason as set forth in claim 5.

Regarding claim 14, the claim is interpreted and rejected for the same reason as set forth in claim 6.

4. Claims 3, 7, 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee in view of Sindhushayana as applied to claim 2 above, and further in view of the admitted prior art (hereinafter APA).

Regarding claim 3, Lee in view of Sindhushayana as applied above does not specifically discloses wherein the predetermined channel resources

comprises a predetermined number of contiguous Walsh codes and a predetermined amount of contiguous real estate on the base station's CDMA ASIC. In an analogous art, the APA clearly discloses the claimed limitation on Page 3, lines 4 – 10. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the technique of the admitted prior art to the system of Lee in order to provide basic building blocks that is necessary to transmit data at high speeds.

Regarding claim 7, Lee in view of the APA as applied above discloses transmitting an ESCAM a predetermined time interval before transmitting a burst segment, the ESCAM providing information for receiving the burst segment (ESCAM is defined in the IS-2000 standard; the APA: Page 2, lines 13 – 22).

Regarding claim 11, the claim is interpreted and rejected for the same reason as set forth in claim 3.

Regarding claim 15, the claim is interpreted and rejected for the same reason as set forth in claim 7.

Response to Arguments

5. Applicant should submit an argument under the heading "Remarks" pointing out disagreements with the examiner's contentions. Applicant must also discuss the references applied against the claims, explaining how the claims avoid the references or distinguish from them. Note applicant failed to provide any argument in response to non-final Office action mailed 5/9/2008. Thus, the rejection is maintained.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Un Cho whose telephone number is (571)272-7919. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/U. C./
Examiner, Art Unit 2617